

## *Yoshiakioclytus*, a New Anaglyptine Genus (Coleoptera, Cerambycidae) from Taiwan

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**Abstract** A new anaglyptine genus, *Yoshiakioclytus* nov., is proposed for the Taiwanese species *Epiclytus taiwanus* CHANG originally described under the genus of the tribe Clytini. The new genus also seems to be isolated among the known members of the tribe Anaglyptini because of the peculiarity of the type species. It may have some relationship with *Hirticlytus* OHBAYASHI endemic to Southwest Japan.

Firstly I wish to express my sincere condolence to the memory of Yoshiaki KOMIYA. He suddenly passed away by heart failure on 1 August 2006 in the course of researching leaf-beetles at Inamura-iwa, Okutama of western Tokyo. I firstly met Dr. KOMIYA in Puli City of central Taiwan about thirty years ago when I was a university student. We usually went to the mountains of central Taiwan for collecting beetles in these years. He always took me along with friendship and kindness in spite of generation gap beyond twenty years, and gave me much scientific knowledge including coleopterology.

In this memorial paper, I am going to propose a new anaglyptine genus for *Epiclytus taiwanus* CHANG occurring in Taiwan. The peculiarity of *E. taiwanus* was provisionally suggested as personal communication by Jun ITO about a quarter century ago; however, I have never undertaken further studies for it until the present time. The type species of the new genus was erroneously described under a clytine genus by misidentification of the original author. This interesting species should be placed not only in the tribe Anaglyptini but also in a new genus as shown in the following lines. The new name is dedicated to the late Dr. Yoshiaki KOMIYA who greatly loved the insects and nature of Taiwan during his life time.

Genus *Yoshiakioclytus* nov.

Type species: *Epiclytus taiwanus* CHANG, 1960.

Anaglyptini. Small anaglyptine of short and thick body in contrast with very long and slender appendages, and clearly isolated among the tribe though slightly similar in facies to *Hirticlytus*. Body black in general, clothed with dense recumbent pubescence, partly decorated with maculation made by black and white pubescence.

Head short and less voluminous, slightly narrowed under eyes in frontal view, almost straightly declivous in profile; frons quadrate, nearly as long as wide, quite even and only weakly convex, without any furrow or carina even though at sides; clypeus trapezoidal, membranous except near base, smooth on surface; labrum arcuately rounded at apical margin; mandible short and broad, rather strongly hooked near apex, with a blunt dent at apical 2/3; maxilla with rather weakly developed galea and lacinia, terminal segment of palpus weakly dilated apicad even in ♂; terminal segment of labial palpus hardly dilated apicad; eyes oblique drop-shaped, small though strongly prominent, very widely separated from one another; genae large, fairly deeper than lower eye-lobes; vertex concave at midline, with antennal cavities moderately raised, rather widely separated from one another; occiput very short. Antennae distinctly longer than body in both sexes, with segments 3 and 4 thickened at each apex, succeeding segments more or less depressed and slightly thicker than basal segments, scape nearly quadrate, slightly depressed, segment 3 distinctly longer than segment 4 and nearly equal in length to segment 5, clothed with minute velvety pubescence in apical seven segments, with a sparse row of erect hairs along underside of basal segments.

Pronotum globose, widest at anterior to middle, constricted at base which is slightly narrower than apex, hardly bordered at both apex and base, markedly convex, provided with a pair of pubescent callosities at sides of posterior to middle. Scutellum moderate, rounded triangular.

Elytra fairly short, nearly twice as wide as the humeri, subquadrate though widely arcuately emarginate at sides, with distinct humeri, apices widely and nearly transversely truncate, without any apical teeth; disc moderately convex, provided with a pair of prominent callosities near base. Hind wing with vein Pc reduced, only sclerotized in apical half and without cross vein connected with anal vein,  $1A_3 + 2A$  well developed and forming an ordinary H-shape.

Prosternum strongly raised towards apical margin of coxal cavities, with narrow prosternal process almost reaching the level of posterior margin of pleural process which is barely reaching the level of external half of coxal cavity. Meso- and metathoraces fairly reduced, moderately convex; mesosternal process relatively broad, moderately narrowed apicad; mesocoxal cavity narrowly open to metepimeron; metepimeron attaining at a level of anterior part of hind coxa. Abdomen broad and very short, with strongly transverse ventrites, last ventrite very short, weakly (♂) or moderately (♀) arcuate at apical margin.

Legs long and slender, with hind femur distinctly exceeding elytral apices, 1st tarsal segment elongate.

Male genital organ relatively small and broad. Median lobe broad, with dorsal plate broadly subtruncate at apex, hardly exposing ventral plate in dorsal view; median struts sinuate; endophallus without any sclerotized structure except for a pair of crescent-like sclerites near base. Tegmen with broad parameres which are shallowly dehiscent, provided with long setae at apex of each lobe. Eighth abdominal segment transverse semicircular.

*Range.* Taiwan.

*Notes.* *Yoshiakioclytus* nov. established herein is proposed for *Epiclytus taiwanus* CHANG originally described from central Taiwan. The type species was regarded as belonging to a clytine genus by misidentification of the original author for the reason of its external similarity to *Epiclytus* species. It no doubt belongs to the tribe Anaglyptini mainly by the basal tubercles on elytra and the short metepimeron which barely reaches the anterior part of hind coxae.

On the other hand, the true affinity of the new genus is almost uncertain. Of all the seven known genera of the tribe Anaglyptini, this new genus may have some relationship with *Hirticlytus* from Southwest Japan. The two genera at least share short, broad and convex body, similar conformation of basal tubercles on the elytra and the male genital organ. Besides, the type species of the two genera are known as the borer of living trunks. However, no important character states can be found between the two genera showing the direct relationship.

The range of *Yoshiakioclytus* nov. has so far been known only in Taiwan as the distribution of the type species. It is expected that new localities of the genus or other close relatives will be found in future on the continental side of China.

*Yoshiakioclytus taiwanus* (CHANG, 1960), comb. nov.

(Figs. 1–13)

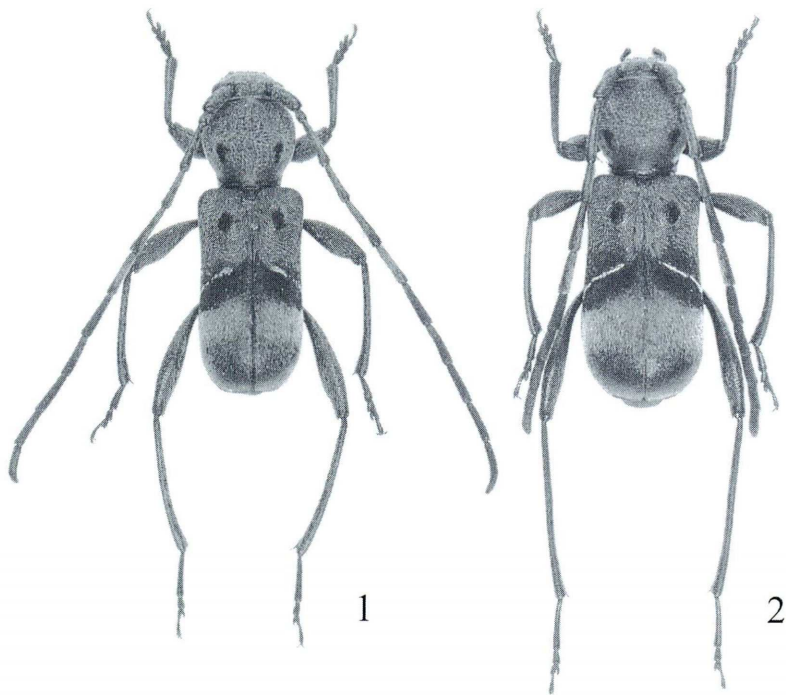
*Epiclytus taiwanus* CHANG, 1960, Bull. Soc. Plant Pathol. Ent., Taichung, 11(3/4), p. 1, pl. 1, fig. 1; type locality: Mt. Chang-sheng.

Body length (measured from apical margin of clypeus to elytral apices) 4.9–5.5 mm in ♂, 5.3–5.8 mm in ♀.

Colour black, slightly brownish in tarsi and mouthparts. Body uniformly clothed with dense recumbent pale gray pubescence, partly with a few brown hairs; antenna with a very sparse row of semi-long black hairs along underside of segments 2–6, supplementary with a similar hair at each apex of segments 7–10; pronotum with black pubescent spots on a pair of weak tubercles at sides of basal third, supplementarily with blackish brown erect hairs at sides of apical half; scutellum thinly pubescent; elytron almost entirely pale gray pubescent, though the pubescence is sparse near middle and apical fifth due to seeming black bands, with a black pubescent spot on the prominent callosity near suture behind scutellum, an oblique black pubescent band near middle, and an linear incomplete white one along anterior margin of the black band; ventral surface densely clothed with pale gray pubescence, though the pubescence is longer than on dorsum, partly with white pubescent maculation at posterior margin of mid coxae, apical sides of mesosternum, just before apex of metepisternum and along external halves of apical margin of mesosternum.

Head across prominent eyes more than 1.3 times as wide as pronotal apex, closely and somewhat rugosely punctured throughout; frons nearly as long as wide, weakly





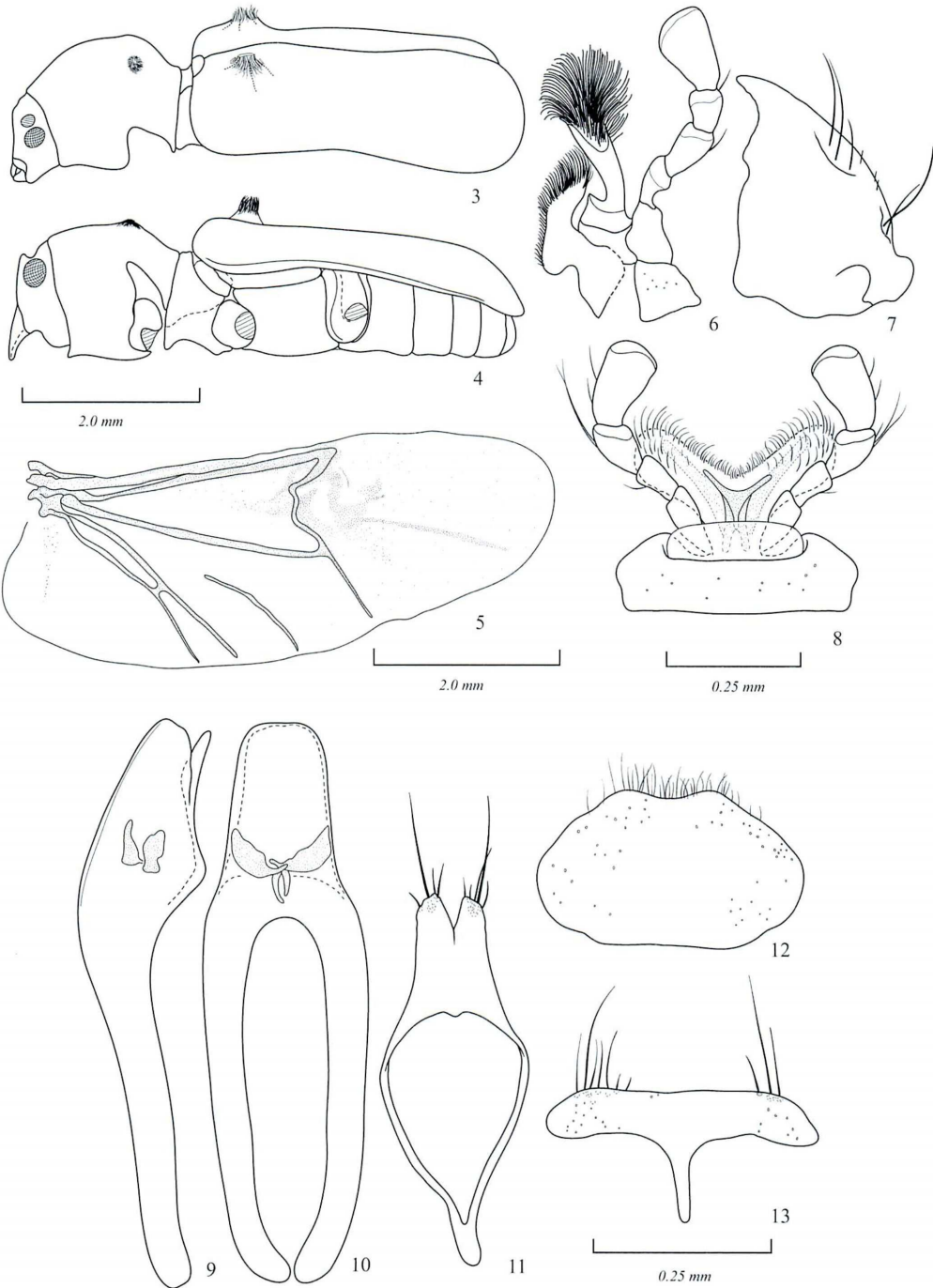
Figs. 1-2. *Yoshiakioclytus taiwanus* (CHANG), comb. nov. — 1, Male from Lienhwachih, central Taiwan; 2, female from Wulai, northern Taiwan.

convex towards centre, slightly depressed near apex, parallel-sided; genae 1.2 times as deep as lower eye-lobes; vertex flattened, with prominent antennal cavities separated from each other by a little more than a half width of occiput; eyes small though markedly prominent, separated from each other by 4.4 times of the diameter. Antennae surpassing elytral apices at segment 8 ( $\sigma^7$ ) or segment 10 ( $\varphi$ ), with scape slightly dilated to apex, closely punctured, segments 3 and 5 equal in length, the longest, terminal segment strongly arcuate in apical half.

Pronotum nearly 0.9 times as long as the maximum width, slightly contracted to base than to apex, with sides arcuately dilated to apical third ( $\sigma^7$ ) or just before middle ( $\varphi$ ), then arcuately narrowed to subparallel part in basal eighth; disc well convex, highest at apical 4/9, strongly declivous in basal third, provided with a pair of small pubescent callosities at sides of basal third. Scutellum rounded triangular.

Elytra a little less than twice ( $\sigma^7$ ) or nearly 1.8 times ( $\varphi$ ) as long as the humeral

Figs. 3-13. *Yoshiakioclytus taiwanus* (CHANG), comb. nov. — 3, Body in dorso-lateral view; 4, ditto in ventro-lateral view; 5, hind wing; 6, maxilla in ventral view; 7, mandible in dorsal view; 8, labium in ventral view; 9, median lobe in lateral view; 10, ditto in dorsal view; 11, tegmen in dorsal view; 12, 8th tergite in dorsal view; 13, 8th sternite in ventral view.



width; sides with somewhat projected humeri, subparallel in basal fourth, moderately ( $\sigma^7$ ) or slightly ( $\varphi$ ) arcuately emarginate to apical fourth then roundly narrowed to subtransversely truncate apices; disc uniformly convex though strongly raised towards apical fourth, with a pair of markedly prominent callosities approximate between suture near basal fifth, finely closely punctured, though the punctures are coarser in basal 2/3.

Ventral surface closely punctured, provided with dense transverse furrows near apical third of prosternum; anal ventrite nearly a half of the preceding ventrite and 1/20 the length of abdomen.

Legs very long and slender, especially in  $\sigma^7$ , with femur exceeding elytral apices at apical 2/5 ( $\sigma^7$ ) or 1/3 ( $\varphi$ ), tibia slightly arcuate in apical third, 1st tarsal segment twice as long as the following two segments combined.

Male genital organ rather lightly sclerotized. Median lobe 3/10 the length of elytra; dorsal plate very broad, subparallel-sided, with broadly truncate apex; ventral plate weakly divergent apicad before apical margin which is subtruncate with weak emargination at middle; median struts distinctly sinuate, nearly 3/5 the length of median lobe. Tegmen 2/3 the length of median lobe, with parameres slightly dilated apicad, triangularly dehiscent in 3/10 of the whole length in mid-line, each lobe obliquely truncate at apex which is provided with a few long setae. Eighth tergite strongly transverse, gently emarginate at middle of apical margin. Eighth sternite anchor-shaped, widely triangularly concave at middle of apical margin.

*Specimens examined.* 1  $\sigma^7$ , Lienhwachi, Yuchih, Nantou Hsien, C. Taiwan, 17-III-1978, J. ITO leg.; 1  $\varphi$ , Jiuyuetan, Yuchih, 16-XII-1993, T. KISHIMOTO leg.; 1  $\sigma^7$ , Shinshien, 500-800 m in alt., Wulai Township, Taipei Hsien, N. Taiwan, 25-II-2002, W.-I CHOU leg.; 1  $\varphi$ , same locality, 600 m in alt., 28-II-2002, W.-I CHOU leg.; 1  $\varphi$ , Fushian, 600 m in alt., Wulai Township, Taipei Hsien, T. KURIHARA leg.

*Host plant.* *Diospyros oldhami* MAXIM. var. *chartacea* HAY. (Ebenaceae) (CHANG, 1960).

*Distribution.* Taiwan.

*Notes.* *Yoshiakioclytus taiwanus* appears in early spring, and its peak period is several weeks between mid February and early March on the mountains near Taipei Hsien. I examined one female specimen collected from Jiuyuetan of the central mountains of Taiwan in mid December. This species may sometimes appear in such winter season. The adult beetles usually come by flying to the blossoms of *Litsea cubeba* (LOUR) PERS or *Castanopsis carlesii* (THUNB ex MURRAY) SCHOTTKY var. *carlesii* (HEMSL.) on clear day (CHOU, 2004, CHOU, pers. comm.).

The larval stage of *Y. taiwanus* is almost unknown. According to CHANG (1960 b), the unique holotype male was dug out from the living trunk of *Diospyros oldhami* var. *chartacea*. It is a very interesting fact for feeding habit. *Hirticyclitus comosus* (MATSUSHITA) is known as the borer of living *Podocarpus nagi* ZOLL. et MORITZI., though its host plant is a conifer. The similar habit is known in the cases of *Oligoenoprus* CHEVROLAT from East Asia and *Microclytus* LECONTE from North America. The larvae of the two genera mine in the barks of living decayed broadleaved trees and



pupate in the same places.

### Acknowledgements

I wish to heartily thank Dr. Shun-Ichi UENO for his continuous guidance and critical review of the original draft of this paper. Hearty thanks are also due to Mr. Jun ITO, who firstly suggested me the systematic position of *Epiclytus taiwanus* in the Anaglyptini more than a quarter century ago, to Drs. W.-I CHOU and Toshio KISHIMOTO, Messrs Takashi KURIHARA and Y.-L. LIN for their kind offer of invaluable material used in this study, and also to Mr. Takashi MIZUSAWA for taking photographs inserted in this paper.

### 要 約

新里達也：台湾におけるトガリバアカネトラカミキリ族の1新属。——台湾産 *Epiclytus taiwanus* CHANG を基準種として、トガリバアカネトラカミキリ族の新属 *Yoshiakioclytus* nov. を創設した。本新属の基準種は、トラカミキリ族のヨコヤマトラカミキリ属のもとに記載されたが、上翅基部の毛束を備えた隆起や後方に伸張しない後胸後側板などの形質からトガリバアカネトラカミキリ族に所属すべきであることは間違いない。この新属の直接の類縁関係は明らかではないが、あえて既知属にそれを求めるとすれば、西日本に分布するケブカトラカミキリ属といくつかの類似点が見出しえるが、異なる点も少なくない。おそらく、台湾対岸の大陸側から、本属かそれに近縁な属が将来発見されるにちがいない。

新属名には、昨年夏に急逝された小宮義璋博士を偲び、*Yoshiakioclytus* と命名した。私は学生時代の数年間にわたり、小宮博士とご一緒に台湾中部の山を採集に歩いた。往時より、台湾の昆虫と風土をこよなく愛されておられたことを思い出す。

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